

**Mouse Anti-Thyroglobulin [2H11+6E1]: MC0255, MC0255RTU7**

**Intended Use:** For Research Use Only

**Description:** Thyroglobulin (TG) is a dimeric glycoprotein specific to the thyroid gland which belongs to the type-B carboxylesterase/lipase family. It is the precursor of the iodinated thyroid hormones triiodothyronine (T3) and thyroxine (T4). Variations in TG are associated with susceptibility to autoimmune thyroid disease type 3, and defective or impaired TG synthesis usually results in congenital goitrous hypothyroidism, virtual absence of TG in thyroid tissue, and the presence of an elevated concentration of iodoalbumin. The final result of these abnormalities is a decreased rate of T3 and T4 synthesis. Thyroglobulin is found in normal thyroid and differentiated thyroid carcinoma cells but not undifferentiated thyroid. Thyroglobulin is a useful marker for identification of tumors with thyroid origin.

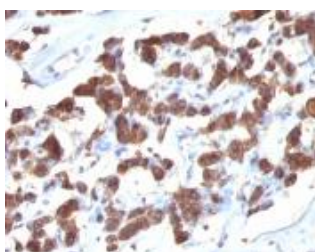
**Specifications**

Clone: 2H11+6E1  
 Source: Mouse  
 Isotype: IgG's  
 Reactivity: Human, mouse, rat  
 Localization: Cytoplasm, secreted  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, Flow Cyt., WB  
 Package:

Description	Catalog No.	Size
Thyroglobulin Concentrated	MC0255	1 ml
Thyroglobulin Prediluted	MC0255RTU7	7 ml

**IHC Procedure**

Positive Control Tissue: Thyroid, thyroid cancer  
 Concentrated Dilution: 100-500  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual  
 \* Result should be confirmed by an established diagnostic procedure.



FFPE human thyroid stained with anti-Thyroglobulin using DAB

**References:**

1. Estrogen and thyroid cancer is a stem affair: A preliminary study. Zane M, et al. Biomed Pharmacother 85:399-411, 2017.
2. Functional Thyroid Follicular Cells Differentiation from Human-Induced Pluripotent Stem Cells in Suspension Culture. Arauchi A, et al. Front Endocrinol. 8:103, 2017.
3. Expression of thyrotropin receptor, thyroglobulin, sodium-iodide symporter, and thyroperoxidase by fibrocytes depends on AIRE. Fernando R, et al. J Clin Endocrinol Metab 99:E1236-44, 2014.
4. Human fibrocytes coexpress thyroglobulin and thyrotropin receptor. Fernando R, et al. Proc Natl Acad Sci U S A 109:7427-32, 2012.

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